ELEGANT AND CURIOUS CLOCKS.

By N. S. Stowell.

How many men have wasted their lives and their substance in the endeavor to discover the secret of perpetual motion, the indefatigable statistician has never yet told us. That the elusive, fractional unknown quantity upon which the success of the undertaking turned should be brought to light by nineteenth century artizans, is, in view of other contemporary discoveries, scarcely remarkable.

To construct a piece of machinery able of itself to restore lost motion, and to replace exhausted force, was by the fates reserved for a New York clock maker, who has as far as clocks are concerned solved the mystery of perpetual motion. This clock is so constructed that every revolution of one of the driving wheels moves a wheel which is so connected with the winding apparatus that every tick of the clock takes up lost force, and the clock winds itself up as fast as it runs down. Once started, it requires neither winding or attention, but will run indefinitely. This, simply as a power, is probably one of the most important improvements in clock mechanism in existence. Of course there are all manner of attachments and mechanical figures, but they are to be considered as distinct and apart from the motive power.

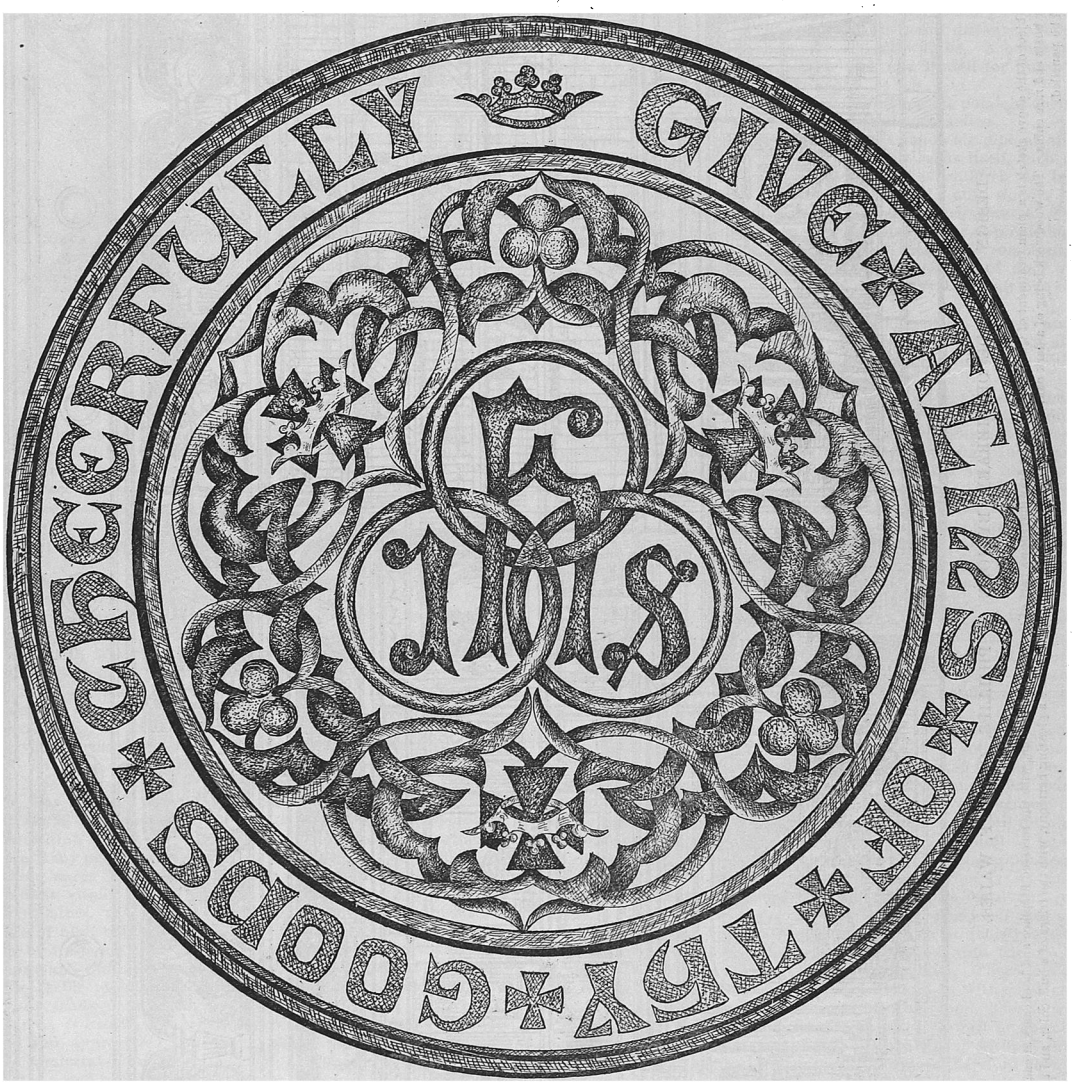
Another remarkable clock is so arranged that from a central clock in the library the time pieces in all the various rooms are controlable. By this means the head of the family may set the hour for ringing the rising bell, and at a given time strike the alarm in every sleeping room in the house. Several of these clocks have been put up in and about New York, and have been the subject of much interest and comment.

A remarkable clock of very recent date is constructed on a most ingenious plan. There are at least five main wheels, four of which are driving wheels, each one having an independent action. These communicate motion to the fifth, which acts as an equalizer. By this means any irregularity of one action is counterbalanced by another, and the trifling gain or loss of speed may be so accurately regulated and perfectly balanced, than an almost absolutely correct average of time is obtained.

An indispensible attachment to the modern high class clock is a set of chime bells. These are arranged in various ways, the gong being most used. The latest improvement consists of a row of silver pipes not unlike organ pipes, suspended by slender threads. The range is ordinarily an octave, and the striking attachment brings the hammer down one after another or in unison, as the case may be, producing a clear musical tone not unlike a fine silver bell.

This form of chimes is suitable only for large or hall clocks, as the pipes must be of considerable length to give the perfect ringing bell tone.

In very short lengths they are apt to have a somewhat sharp metalic ring, or a "tinny" sound that is harsh and disagreeable. Of a set of these pipe chimes just put into a large clock, the longer pipe measures something like four feet, the others are graduated like organ pipes.

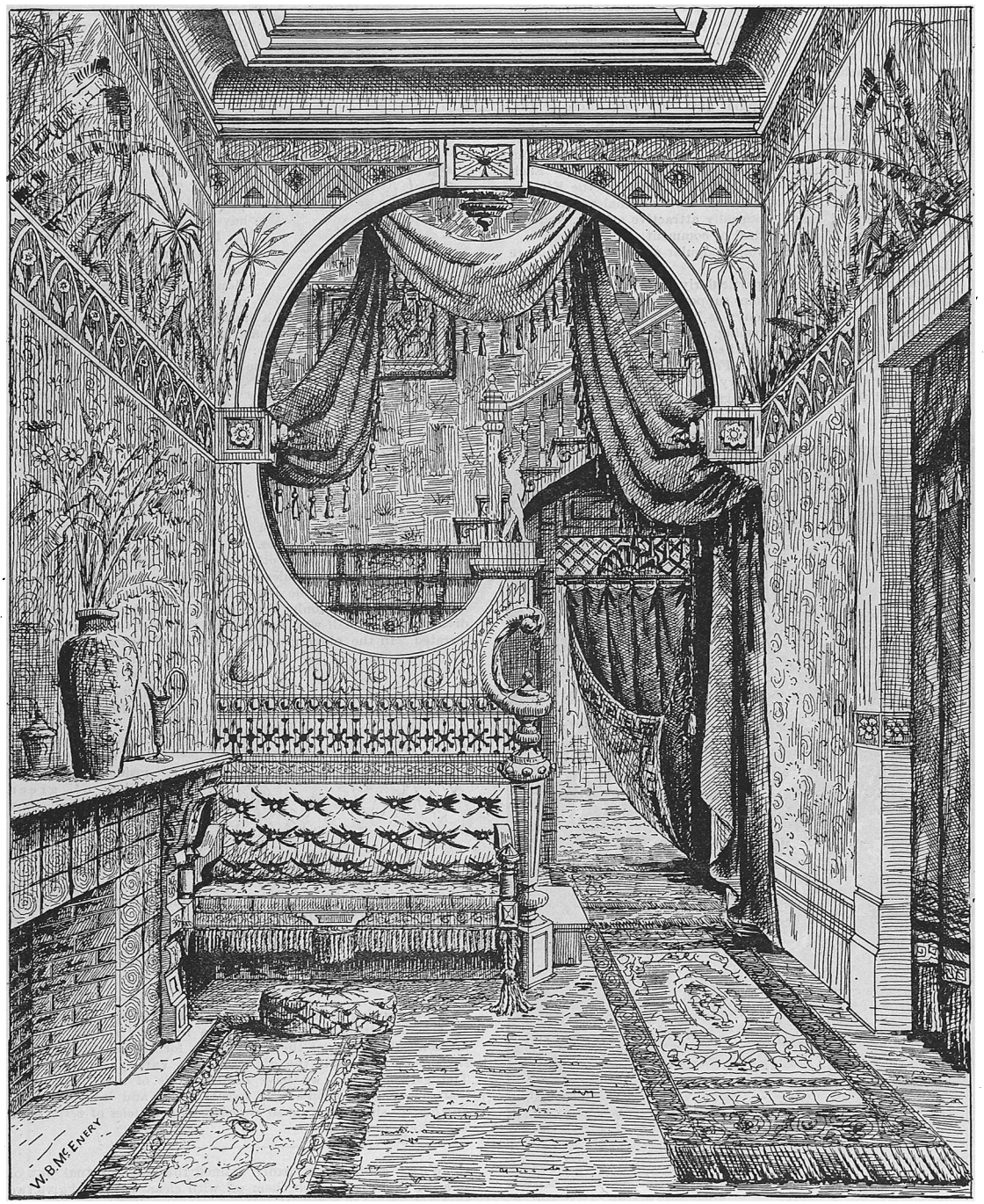


ORIGINAL DESIGN FOR ALMS BASIN, IN REPOUSSE AND CHASING.
EXECUTED IN COPPER BY MRS. N. W. JOSSELYN, PUPIL OF THE WOMAN'S INSTITUTE OF TECHNICAL DESIGN, NEW YORK.

Some of the new cases are marvels of artistic design and fine execution. One that is specially notable is of teak wood carved in vine and trellis work of the utmost delicacy. The body is curved in at the middle and broader at top and base. Another style of somewhat similar shape is done in putty colored enamel with gold filligree.

Some heavy oaken cases are very elegant. One has every available corner covered with elaborately carved cupids and heads with wings. This case has a very solid heavy carved base, the pedestal portion being about three feet high. The back is thin and has finely carved edges. There are no front corner parts or supports, but directly in the middle of the front edge is a single carved pillar, slender and delicate. This makes a triangular space midway of the body of the clock. In this is a shaft or projection suitable for a handsome bronze or vase. The top portion, which contains the works, is massive and square, as befits the heavy base or pedestal. There are no weights, the clock working by spring movement. There is a good deal of fine gilding artistically distributed, and the clock will be one of the finest time keepers ever made. The case stands about eight feet high and measures about two and one half feet across the bottom of the pedestal.

The large hall clock is every year coming into more general use, and families who have ancestral timepieces of this sort are congratulating themselves on the possession of valuable relics of past days. New clocks of this description are copied after various antiques and the assortments show many admirable specimens of the clock maker's art. Mahogany, rosewood, cherry, oak and walnut are used, also thin woods with fine enamel and



DESIGN FOR HALL AND DRAPERY, BY W. B. M'ENERY.

veneers. The various electric clocks have about them little that is novel, save the machinery, by means of which the electric power is applied.

Many large clocks are connected by electric wires with observatory clocks, and keep precisely the same time. This is every year growing more general, and many of the larger buildings and institutions are having their time pieces so connected.

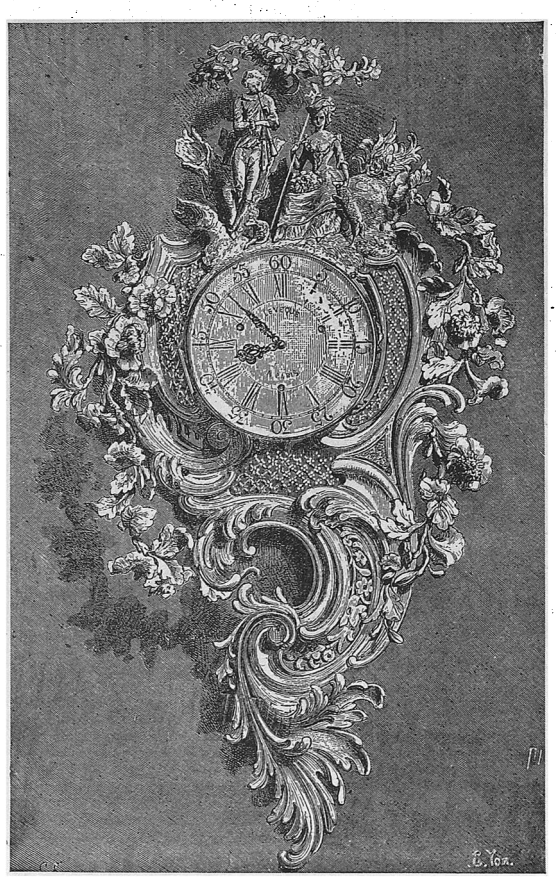
In smaller clocks there are many especially attractive novelty designs. A lighthouse has a dial in one side and a miniature flash light upon the loft, the light revolving with the motion of the clock. A windmill with a window in one side has a clock dial set in the casing. The arms turn by means of wheels attached to the running gear. A trip hammer is similary constructed and operated, the hammer falling upon a bar of metal held by a workman.

A well, with bucket, curb and long sweep, is another design. An engine, with governor, valves, piston and fire box, every portion complete, a genuine working model, is another result of mechanical genius. There seems to be an effort to utilize nearly every sort of machinery for clock cases and with very satisfactory results.

Bronze clocks are less popular just now than those of gilt, ormulu or enamel. Brass clocks are popular, and gold and fine decorated china cases are in high favor. Some exceptionally fine specimens were recently viewed from the King Ludwig collection. They are done in the most exquisite style in natural colors. Each one is unique, all having been special orders from the King to the royal factories, and each has its own original points. The collection embraced many unusually attractive articles, and has been the occasion of a great deal of comment.

Clocks in form of helmets are popular among those who are enthusiasts on armor.

Onyx and gold clocks are particularly beautiful and are shown in great variety Polished columns support arches where the works are placed; a solid block of onyx is hollowed out, and a spring clock is set in the circular opening. A pyramid has a clock set in near the top, and an old mill has a clock under its eaves, and turning a paddle wheel below. Faience and metal of all sorts are used for clock cases, and every odd or graceful arrangement that the most fertile brain can suggest is carried out.

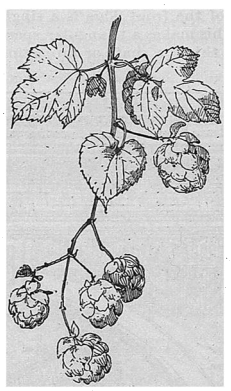


LOUIS XV. CLOCK, IN BRONZE, CHASED AND GILDED.

PLANT FORMS IN ORNAMENT.

NUMBER ONE. THE HOP.

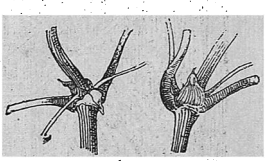
THE decorative possibilities of the hop will readily suggest themselves to any one who will give even casual study to Mrs. Hodgson's graceful drawing in this issue. To those who have seen a hop field in full bloom it has always been a surprise that so little use of this beautiful plant has been made by the decorative artist. The rich deep green of the leaves and the delicate yellowish green of the gracefully drooping cones form an exquisite color harmony. The accompanying drawings of the leaves, stipules and top clusters are by George Charles Hallé, who says in his work on plant studies, that while under cultivation the Hop is familiar to most of us, as a wild plant of the hedge-row it is not so well known, though it is to be found in many localities, and is always a pleasing object. The genus consists of a single species, although we have many cultivated varieties.



CLUSTER OF HOPS.

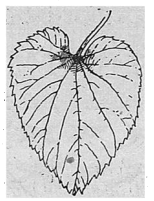
If we look carefully, we cannot fail to notice two very different kinds of blossoms on the Hop; one growing in a loose panicle of small yellowish-green flowers, and the other in a cluster or bunch of globular heads or spikes. These are the male and female flowers, which are produced on separate plants; both are very beautiful in their form of growth, although the latter only is considered of any value for brewing.

The Hop has no tendrils, but its stem twists around any support, and climbs with great facility, always turning from right to left with the sun.

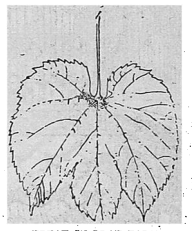


STIPULES.

The leaves are deep green in color, and palmately veined, with the veins most prominent on the under sides. They grow opposite each other on long stalks, at the base of which small united stipules form. At the ends of the shoots, and amid the hops, the leaves are inclined to be heart-shape, but they are commonly three or five lobed, with the lobes divided about half-way down, and the edges rather coarsely serrated. In the older growths seven-lobed leaves may be seen, and freaks or departures from the true forms are very frequent.



TERMINAL LEAF.



FREAK IN LEAF FORM.

The female flowers, as mentioned above, grow inside the small spikes of green scales; they have no true petals, and are almost unnoticeable. As the seed matures, the overlapping scales become greatly enlarged, and the spike increases to a large cone-like catkin of a delicate yellowish-green color. These catkins or hops are either ovate or round in form, and hang in graceful pendent clusters. At this period of its growth the plant may be said to be in its supreme beauty.

THE drawing-room should look homelike, whatever the special art treasures it may contain, and the furniture should be comfortable. There is not the same reason for having this furniture *en suite* as there is in the dining-room. Variety is acceptable. The general effect we have mentioned is of more importance than the display of objects of special merit and intrinsic value. Further, it should not be so crowded with articles of *vertu* as to look like a museum.

WHEN ceilings are badly stained the only effectual way of treating them is to wash them off with clean water and give two coats of oil paint before the distemper is applied.